

TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT Process)

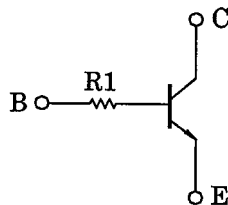
RN1910,RN1911

Switching, Inverter Circuit, Interface Circuit
And Driver Circuit Applications

Unit: mm

- Including two devices in US6 (ultra super mini type 6 leads)
- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process
- Complementary to RN2910, RN2911

Equivalent Circuit

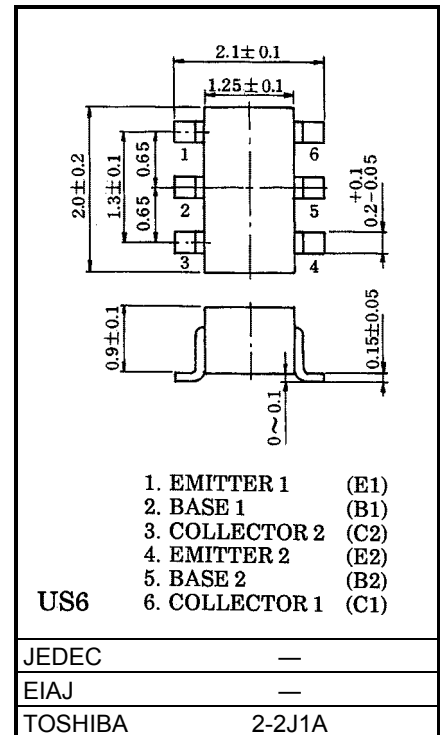
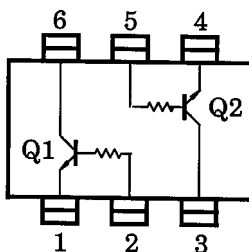


Maximum Ratings (Ta = 25°C) (Q1, Q2 Common)

Characterisctic	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	50	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	100	mA
Collector power dissipation	P_C^*	200	mW
Junction temperature	J_j	150	°C
Storage temperature range	T_{stg}	-55~150	°C

*: Total rating

Equivalent Circuit (Top View)



Weight: 6.8mg

Electrical Characteristics (Ta = 25°C) (Q1, Q2 Common)

Characteristic		Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current		I_{CBO}	—	$V_{CB} = 50V, I_E = 0$	—	—	100	nA
Emitter cut-off current		I_{EBO}	—	$V_{EB} = 5V, I_C = 0$	—	—	100	nA
DC current gain		h_{FE}	—	$V_{CE} = 5V, I_C = 1mA$	120	—	700	—
Collector-emitter saturation voltage		$V_{CE(sat)}$	—	$I_C = 5mA, I_B = 0.25mA$	—	0.1	0.3	V
Translation frequency		f_T	—	$V_{CE} = 10V, I_C = 5mA$	—	250	—	MHz
Collector output capacitance		C_{ob}	—	$V_{CB} = 10V, I_E = 0V, f = 1MHz$	—	3	6	pF
Input resistor	RN1910	R1	—	—	3.29	4.7	6.11	kΩ
	RN1911				7	10	13	

(Q1, Q2 Common)

